

# PATENT SPECIFICATION

322,688



Application Date: Jan. 24, 1929. No. 2620/29.

Complete Left: Oct. 15, 1929.

Complete Accepted: Dec. 12, 1929.

## PROVISIONAL SPECIFICATION.

### Improvements in Electric Imitation Fires.

I, HERBERT HENRY BERRY, a British Subject, of 85 and 86, Newman Street, London, W. 1, do hereby declare the nature of this invention to be as follows:—

This invention relates to electric fires wherein electric lamps having flicker-producing devices are employed and in which the light from the lamps is thrown upon reflectors to simulate flames and smoke.

The invention is particularly applicable to electric fires wherein imitation fuel is arranged in or on a frame and has behind it a coloured screen through which the light from one or more lamps under the "fuel" passes to a reflector behind the fuel, said reflector being arranged to extend upwardly and forwardly as described in the specification of my Letters Patent No. 186,234 or being provided with a matt surface such as described in the specification of my Patent No. 274,615.

Hitherto these colour screens (or the lamps) have been made in one colour (reddish-amber) and whilst the results obtained are distinctly good in representing the major part of the colour of ordinary fires and flames the smaller blue flames which occur in many ordinary fires are not "reproduced".

To change the one colour by introducing a blue shade into it does not improve the effect but as the result of experiments I have found that if the screen is in the main the usual colour with interposed sections, areas or parts of blue the simulation of flames etc. is greatly enhanced.

According to my invention therefore I introduce into electric fires of the kinds first herein referred to means for imparting a blue or bluish effect to parts of the light thrown from the lamp or lamps to the reflector and may do so in any convenient manner, including that above described as the result of my experiments. As an example of the screen or like means for producing the colour I may use a piece of reddish or amber-coloured glass, say glass to which a coloured varnish has been applied, and I may provide in the screen regular or irregular parts which are coloured blue, but it must be understood that this blue effect in places may be obtained in any convenient manner.

Dated this 24th day of January, 1929.

HY. FAIRBROTHER,  
Chartered Patent Agent,  
30 & 32, Ludgate Hill, London.

## COMPLETE SPECIFICATION.

### Improvements in Electric Imitation Fires.

I, HERBERT HENRY BERRY, a British Subject, of 85 and 86, Newman Street, London, W. 1, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to electric fires wherein electric lamps having flicker-producing devices are employed and in which the light from the lamps is thrown upon reflectors to simulate flames and smoke.

The invention is particularly applicable to electric fires wherein imitation fuel is arranged in or on a frame and has behind it a coloured screen through which the

light from one or more lamps under the "fuel" passes to a reflector behind and above the fuel said reflector being arranged as desired say so as to extend upwardly and forwardly as described in the specification of my Letters Patent No. 186,234 or being provided with a matt surface such as described in the specification of my Patent No. 274,615.

Hitherto these colour screens (or the lamps) have been made in one colour (reddish-amber) and whilst the results obtained are distinctly good in representing the major part of the colour of ordinary fires and flames the smaller blue flames which occur in many ordinary fires

BEST AVAILABLE COPY

are not "reproduced" by the said colour screens.

To change the one colour by introducing a blue shade into it does not improve the effect but as the result of experiments I have found that if the screen is in the main the usual colour with interposed sections, areas or parts of blue the simulation of flames etc. is greatly enhanced.

According to my invention I provide an electric imitation fire of the kind having imitation fuel and a source of flickering light adapted to illuminate the fuel and produce a flame and smoke effect on a reflector behind and above the fuel, with the distinctive feature that I arrange adjacent the reflector a coloured screen which imparts blue or bluish effects to part of the light passing therethrough to the reflector, the usual reddish-amber effects being imparted to other parts of the said light.

As an example of the coloured screen I may use a piece of reddish or amber-coloured glass, say glass to which a coloured varnish has been applied, and I provide in the screen regular or irregular parts which are coloured blue.

I have illustrated my invention by way of example in the accompanying drawings in which:—

Fig. 1 is a perspective view of a fireplace and an electric imitation-fuel fire in it with part of the fuel broken away, and showing one form of my improved screen.

Fig. 2 is a perspective view of a modified form of screen.

In Fig. 1 the fire grate 1 contains slabs 2 of imitation fuel which are illuminated by flickering light from lamps and spinners 3. The rear edge of the top slab of fuel is spaced from the rear vertical wall of the fireplace so that some of the light from lamps and spinners 3 passes to a grey matt or like surface 4 after passing through a colouring screen 5.

In accordance with my invention parts such as 6 of the screen are blue or of a bluish tint and the remaining parts such as 7 are reddish-amber colour. The light passes through the screen to the surface 4 and takes these colours and, due to the facts that it is of a flickering nature and is broken up by the screen, which is of old cathedral glass, muranese glass, or the like, realistic blue and red flame and smoke effects are produced.

The upper part of the fireplace has a reflector 8 for outwardly directing heat

from an element, not shown, behind the upper part of the surround.

In the form shown in Fig. 2 I use a sheet of plain glass 10 that has been coloured, the bluish and amber parts being indicated by 6 and 7 respectively and below this I use a sheet of glass 9 shown as having a rough surface. In place of the plain glass 10 I may arrange adjacent the sheet 9 a number of pieces of both blue and amber glass. These pieces may be cemented to 9 or arranged between 9 and a sheet of plain glass or they may be arranged between two pieces of plain glass spaced from 9.

Additional multicoloured screens may be used and they may be placed in any convenient positions and other colours may be added if desired.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An electric imitation fire of the kind provided with imitation fuel and a source of flickering light adapted to illuminate the fuel and to produce a flame and smoke appearance on a reflector behind and above the fuel, characterised in that a coloured screen is employed adjacent the reflector to impart blue or bluish effects to part of the light passing through the screen to the reflector and also to impart the usual reddish-amber effects to other parts of the said light.

2. An electric imitation fire according to claim 1, wherein the coloured screen is formed by a sheet of glass having cemented or arranged adjacent to it a number of pieces of both blue and amber glass.

3. An electric imitation fire according to claim 1, wherein the coloured screen is formed by a number of pieces of both blue and amber glass arranged between two pieces of plain glass.

4. An electric imitation fire according to claim 1 or claim 3, wherein a sheet of glass having a rough surface is arranged below the coloured screen.

5. Electric imitation fires provided with coloured screens substantially as herein described and illustrated.

Dated this 15th day of October, 1929.

HY. FAIRBROTHER,

Chartered Patent Agent,

30 and 32, Ludgate Hill, London, E.C. 4.

[This Drawing is a full-size reproduction of the Original]

FIG. 1

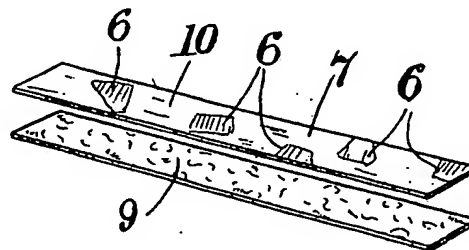
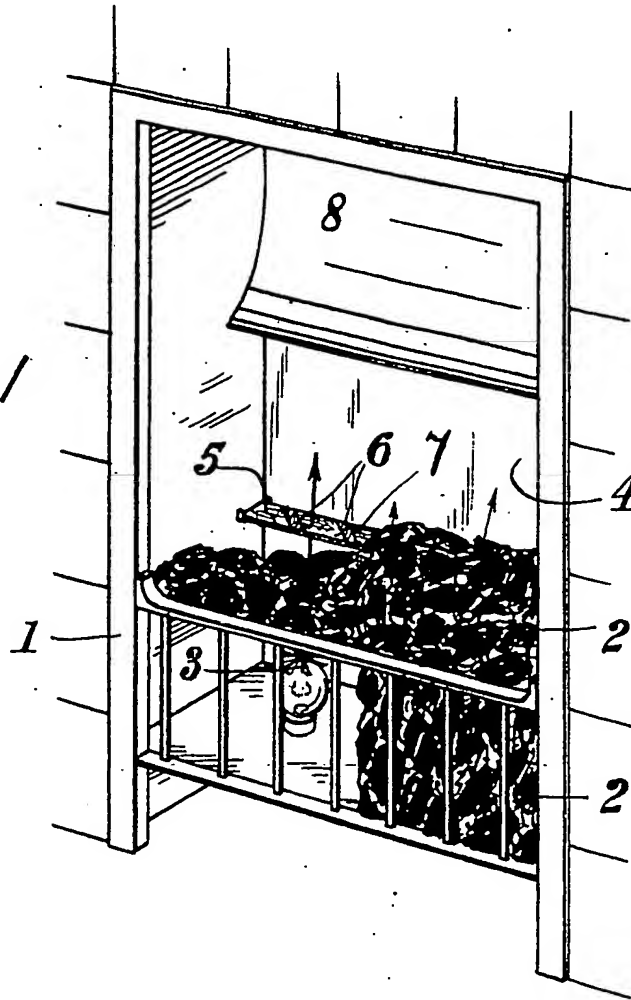


FIG. 2

Charles & Read Ltd. Photo Litho